

Notice of Allowability

Application No.

10/605,188

Examiner

Frank S Tsay

Applicant(s)

HORTON ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to original application filed on 9/12/03.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 8/2/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 1, line 6, after "greater than the density", a word: --- of ---- has been inserted, for an obvious typographical error.

Allowable Subject Matter

Claims 1-8 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record, including Bourgoyne et al (Annual Offshore Technology Conference, 1999) and House et al (WPI Database XP002280069, or US 5009798), as noted in PCT/US 03/28568 search report on May 13, 2004. Wherein, Bourgoyne et al identifies the method of treating the problem of sustained casing annulus pressure in offshore wells due to casing leakage, Bourgoyne et al reference further suggests the injection of high density brine such as Zinc bromide, such that the hydrostatic pressure in the annulus can gradually be increased using so called "stair-step" procedure (page 6, col. 2). Such procedure by its nature teaches away from using a viscosifying additive, since Bourgoyne et al requires the steps of gradually increasing the density of casing annulus fluid through a stepwise mixing of the high density brine with the lower density casing

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annulus fluid. House et al, however, teaches the use of heavy brine composition containing Zinc bromide and one or more soluble salts selected from the group containing calcium chloride and calcium bromide in combination with hydroxyethyl cellulose as a fluid loss additive. House et al reference clearly teaches away from the art of treating sustained casing annulus pressure, since House et al solutions are to be used in well completion and workover services where fluid losses are of major concern. Bourgoyne et al and House et al stands alone or in combination, therefore at least fail to teach or suggest the basic features of at least Claim 1 and claim 8, which require the use of heavy brine solution for treating the sustained casing annulus pressure that requires the formulating of high density brine to include a viscosifying agent in a concentration to make the brine displacing the casing annulus fluid without dispersing or mixing with the annulus fluid.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

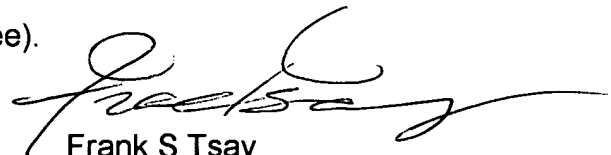
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. House et al '406, Weaver et al, DeMoss, Haberman et al, Monjure et al, and Chan all disclose the apparatus and/or method of well bore or annulus fluid pressure controls.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank S Tsay whose telephone number is (703) 308-2170. The examiner can normally be reached on Monday thru Friday, 7:30am-5:00 pm, 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on (703)308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frank S Tsay
Primary Examiner
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3/3/05